

Work Order ID 161499

Tuesday, May 16, 2017 2:32:51 PM

161499

Page 1

Item ID: D3801-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Hand Retractable Spring Plunger
Start Date: 5/16/2017 Start Qty: 6.00 ***6*** Cust Item ID:
Required Date: 5/23/2017 Req'd Qty: 6.00 ***6*** Customer:
Reference: SCHEDULED

Approvals: Process Plan: **DAS** Date: **MAY 16 2017** Tooling: Date: Run Start ***NR1***
21 QC: **9-89** Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3801	B

100 PURCHASING 0.00 **DAS**
13
9-89

100

Purchasing

Memo

Purchasing

Issue P/O: **36377**

Purchase Part Number: KBP-504

Supplier: Essentra

Certificate of conformity is required

110

Receive & Inspect for Damage & Mat'l Certs

0.00

110

Packaging

Memo

Packaging

Ensure material certification is attached

120

QC6- All purchased or subcontracted products

0.00

120

QC

Memo

Quality Control

Ensure Material certification comply to Dwg D3801

DAS
38
9-89
MAY 31 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		
Past Expiry Date ☐	Manufacturing Process ☐	OTHER : _____					
Misidentified ☐	Past Due ☐						

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Page 2

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Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130	Identify as per dwg & Stock Location: <u>Stosa</u>	0.00							
130									
Packaging	Memo	0.06							
Packaging									
140	QC21- Final Inspection - Work Order Release	0.00							
140									
QC	Memo	0.60							
Quality Control									

6
DAS
6
9-89
MAY 31 2017
17/6/2
MAY 31 2017

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
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Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER :			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Tuesday, May 16, 2017 2:32:53 PM

Page 1

Work Order ID: 161499

Parent Item: D3801-1

Parent Item Name: Hand Retractable Spring Plunger

Start Date: 5/16/2017

Required Date: 5/23/2017

Start Qty: 6.00

Required Qty: 6.00

Comments: IPP Rev:A 08-07-22 new issue DD verified by:EC IPP REV:B 12.03.06 AS PER
DWG REV.B DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
KBP-504 Hand Retractable Spring Plunger		Purchased	No			110	Each	0.0000	1	6			

6x SP17-5-30

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

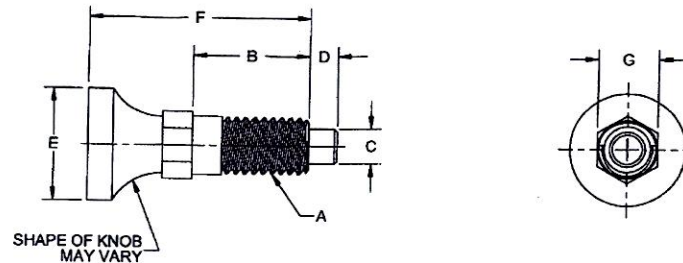
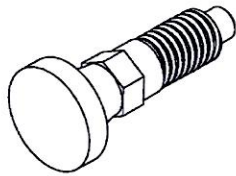
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date : _____		Step # : _____		QTY Effective : _____			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By _____		
							Lead hand / Supervisor Approval Verification _____		
							QC / QA Coordinator Approval _____		

Root Cause			FAULT CATEGORY							
Environment ☐	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong
Design ☐	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions
Doc/Data ☐	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance
Equip/Tooling ☐	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect
Handling/Pre ☐	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing
Material ☐	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved
Internal Transport ☐	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing
Tribal Knowledge ☐	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish
LOA ☐	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread
Substation ☐	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence
Past Expiry Date ☐	☐	Manufacturing Process	OTHER : _____							
Misidentified ☐	☐	Past Due								

SPECIFICATION CONTROL DRAWING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 161499 MJS
170516

D3801-X HAND RETRACTABLE SPRING PLUNGER

DART P/N	SUPPLIER	SUPPLIER P/N	'A' THREAD SIZE	'B' THREAD LENGTH	'C' NOSE DIAMETER	'D' NOSE LENGTH	'E' HEAD DIAMETER	'F' LENGTH	'G' WIDTH ACCROSS FLATS	MATERIAL (BODY/ NOSE)	MATERIAL (KNOB)	TYPE	END FORCE (lbs)	WEIGHT (lbs)
D3801-1	REID SUPPLY COMPANY	KBP-504	3/8-24 UNF	0.67	0.197	0.20	0.83	1.71	0.50	303 SS	BLACK DELRIN	NON-LOCKING	2.7	0.01
D3801-3	REID SUPPLY COMPANY	PRT-22 OR PRT-22N	1/2-13 UNC	1.00	0.313	0.25	1.00	1.90	0.52	303 SS	WHITE DELRIN	NON-LOCKING	1.75	0.02

- NOTES:
1) MATERIAL: SEE TABLE
2) FINISH: N/A
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED
5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
6) IDENTIFICATION: N/A

B	SUPPLIER P/N CHANGED: BODY/NOSE MAT'L WAS STEEL NOW STAINLESS STEEL. REF. CARY12-58		MB	12.02.24
A	NEW ISSUE		MB	08.06.19
REV.	DESCRIPTION		BY	DATE
DESIGN	DART AEROSPACE LTD		REV. B	
DRAWN	HAWKESBURY, ONTARIO, CANADA		SHEET 1 OF 1	
CHECKED	DRAWING NO. D3801		SCALE	
MFG. APPR.	TITLE		NTS	
APPROVED	HAND RETRACTABLE SPRING PLUNGER			
DE APPR.	DATE 12.02.24		COPYRIGHT © 2008 BY DART AEROSPACE LTD	
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL, AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR FOR CONSTRUCTION TO ANY OTHER PERSON WITHOUT THE PERMISSION FROM DART AEROSPACE LTD.				

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐				
Date : _____	Step #: _____	QTY Effective : _____			MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			Completed By Lead hand / Supervisor Approval Verification	
					QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐				
OTHER : _____						



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Tel: 613 632 9577
Fax: 613 632 1053

PURCHASE ORDER

Purchase Order ID **PO36377**

Purchase Order Date 5/19/2017

PO Print Date 5/19/2017

Page Number 1 of 3

Order From :

VC-ESS001

ESSENTRA COMPONENTS
P.O. BOX 9900 T-9915
POSTAL STATION A
TORONTO, ONTARIO M5M 2J2
CANADA

Ship To : DART AEROSPACE LTD

1270 ABERDEEN
HAWKESBURY, ON K6A 1K7
CANADA



Contact Name

Vendor Phone

Ship To Contact

Ship To Phone

Ship Via:

FedEx Economy collect

Ship Acct:

Buyer

Chantal Lavoie

Customer POID

Customer Tax #

10127-2607

Terms

Net 30

Currency

CAD

FOB

Destination-Collect

Line Nbr	Reference Vendor Part Number Line Comments Delivery Comments	Description/ Mfg ID	Req Date/ Taxable Promise Date	CD	Req Qty/ Unit of Measure	PO Unit Price	Extended Price
1	KBP-504 AS PER DWG D3801 REV. B B161499	Hand Retractable Spring Plunger	5/26/2017 Yes 5/26/2017		6.00 Each	\$24.46	\$146.76
Line Total:							\$146.76
2	KCL-208 AS PER DWG D2372 REV. B B161500	Cam Lever	5/26/2017 Yes 5/26/2017		10.00 Each	\$29.32	\$293.20
Line Total:							\$293.20
3	CBL-1240	Cable	5/26/2017 Yes 5/26/2017		200.00 f	\$0.32	\$64.00

Note:

5/19/2017



Essentra Components
2538 Speers Road, Unit 7
Oakville, ON L6L 5K9
Phone: 905-825-0134
Fax: 905-825-2919
www.essentracomponents.com

Packing List
LOAD NUMBER 687728
SID/INV 1651104
CUSTOMER PO PO36240
ORDER NUMBER 2369210
CARRIER Fed Ex Standard Overnight
SHIP DATE 05/26/17
FOB DESCRIPTION COL

SOLD TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

DELIVERY TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

LINE NO	PART NO. DESCRIPTION	ORIGINAL QUANTITY	QUANTITY SHIPPED	CTNS	NET WEIGHT	TOTAL WEIGHT
5	BLBS-0016A B156101 3/16 X 1.25 SS BL PIN BUTTON HANDLE Cust Order #: PO36240 Country Of Origin: US	3.000	1.000	1	.04	1.04
1	KBP-504 3/8-24 NON-LOCKING SS PULL INDEXING PLUNGER Cust Order #: PO36377 Country Of Origin: DE	6.000 ✓	6.000	6	.28	1.28
2	KCL-208 CAM LEVER 2.77 SS ADJ CAM LEVER 1/4-20 X 1.18 STUD Cust Order #: PO36377 Country Of Origin: DE	10.000	10.000	10	1.60	2.60
4	PRSN-375SN	8.000	8.000	8	.21	1.21

Certificate of Compliance

This is to certify that the above material shipped against your purchase order is in conformance with all known requirements, specifications and drawings in effect at the time of manufacture. All applicable physical, functional, dimensional and material test reports are on file at our facility, and may be inspected by your representative upon request.

Richard Queer
Quality Assurance Manager

DAS
38
9-89



Essentra Components
2538 Speers Road, Unit 7
Oakville, ON L6L 5K9
Phone: 905-825-0134
Fax: 905-825-2919
www.essentracomponents.com

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SOLD TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

DELIVERY TO 422854
DART AEROSPACE LTD
1270 ABERDEEN STREET
HAWKESBURY, ON K6A 1K7
CANADA

LINE NO	PART NO. DESCRIPTION	ORIGINAL QUANTITY	QUANTITY SHIPPED	CTNS	NET WEIGHT	TOTAL WEIGHT
	3/8-16 X .63 W/LE SS STUBY PULL PLGR Cust Order #: PO36377 Country Of Origin: US SHIPPED COMPLETE IN 1 CARTON FED EX ACCT # 1517-9324-0					

SP17-5-30

DAS
38
9-89

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Richard Queer
Quality Assurance Manager